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| 10/524,589 | 02/15/2005 | Shinichi Tsuchida | 2005_0170A | 6556 |
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05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/524,589             |  | TSUCHIDA ET AL.     |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Sulaiman Nooristany    |  | 2109                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/28/2007</u> . | 6) <input type="checkbox"/> Other: ____.  |

### Detailed Action

1. This Office Action is response to the application (10/524589) files on 15 Feb 2005.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-  
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, *except* that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

3. Claims 1-9, 11-37 are rejected under 35 U.S.C. 102(e) as being anticipated by **Chow et al. U.S Patent No. US 7,010,002.**

4. Regarding Claims 1, 27 and 29, Chow teaches wherein A home terminal apparatus (The most common access points to communication networks are POTS connections in the residences, SOHO, business and public environments, Col. 1, Lines

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51-53, the access port and the Media Terminal Adapter may be integrated into a single unit, such as an intelligent broadband access point unit, to provide the functions of the access port and the Media Terminal Adapter, Col. 3, Lines 21- 24) for sending/receiving packet data (The access port receives and sends wireless signals to a plurality of wireless devices. This architecture also allows the user to control these devices remotely from the residence, business, SOHO or public environments, Col. 12, Lines 62-66, Media Terminal Adapter uses the access port(s) to receive and send wireless signals to a plurality of wireless devices in accordance with the call and service termination communications, Col. 3, Lines 43-46) to and from a router that is connected to an external network (Edge router (ER)-Enforces the Quality of Service (QoS) policies and is the access router for the packet network, Col. 8, Lines 50-52, Fig.1(124)) to which a server apparatus is connected (Fig. 1, network serves(138), network server platform (108), Network server Platform (NSP) Administers the wireless terminals, including call processing, Operations, Administration and Maintenance (OA&M)Col.8, Lines 57-59), the home terminal apparatus being connected to the router via a home network (Fig. 1, Home network (104,112, EWCSF, Router (124), comprising: a packet generation unit operable to generate packet data to be sent to the server apparatus; a protocol determination unit operable to determine a communication protocol used between the home terminal apparatus and the server apparatus (The primary protocol-specific processes for the wireless interface are handled by the DSPs, while the data and voice information to/from the wireless device is forwarded to the main CPU for routing. Depending on what communication is desired, Col. 19, Lines 12-16); and

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a communication unit operable to send/receive the packet data to and from the server apparatus via the router wherein the protocol determination unit determines that the home terminal apparatus should communicate with the server apparatus using (Media Terminal Adapter uses the access port(s) to receive and send wireless signals to a plurality of wireless devices in accordance with the call and service termination communications, Col. 3, Lines 43-4), (i) a first communication protocol (voice communication) when the communication unit sends address notification packet data generated by the packet generation unit to the server apparatus periodically and repeatedly at a predetermined sending interval via the router (A Short Message server for low-speed home control services. Short Message Service center for delivery of Short Message Service message to wireless devices within the home or business network. This short message server and associated wireless devices may use any standard second-generation or third-generation wireless protocols, Col. 9, Lines 55-62, VoIP, abstract), and (ii) a second communication protocol (data communication) when the communication unit sends/receives control information to and from the server apparatus (EWCSF provides accesses and services from the service provider's broadband packet network via a service provider's broadband transport network. A system controller, the NSP, residing in the service provider's broadband packet network, controls and administers the access ports and associated service requests. A service provider can distribute services via the broadband home access devices through the EWCSF to the subscriber at home, Col. 6, Lines 2-10, VoIP, abstract).

5. Regarding claim 2 and 28, Chow teaches the home terminal apparatus according to Claim 1, as described above. Chow further teaches wherein when the communication unit receives, from the server apparatus, a notification packet indicating an occurrence of a control request to control the home terminal apparatus (A system controller, the NSP, residing in the service provider's broadband packet network, controls and administers the access ports and associated service requests. A service provider can distribute services via the broadband home access devices through the EWCSF to the subscriber at home, Col. 6, Lines 2-10), the packet generation unit generates a connection request packet for making a connection request to establish a connection to the server apparatus, the protocol determination unit determines that the connection request packet should be communicated using the second communication protocol (data communication), and the communication unit receives, from the server apparatus, control packet data including the control request, after the connection is established to the server apparatus using the second communication protocol (In the home environment, the wireless Short Message feature (e.g., as defined in TIA/EIA-136) may be used for supporting one-way/two-way low-speed home control features such as home appliances, electronics, devices, etc, Col. 10, Lines 47-51, Home Control of a TIA/EIA-136-enabled Appliance via the TIA/EIA-136 Short Message Feature. The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively,

Col. 11, Lines 15-24).

6. Regarding claim 3 and 32, Chow teaches the home terminal apparatus according to Claim 1, as described above. Chow further teaches wherein the first communication protocol is UDP voice (communication, VoIP, abstract, Fig. 1), and the second communication protocol is TCP (data communication, VoIP, abstract, Fig. 1).

7. Regarding claim 4, Chow teaches the home terminal apparatus according to Claim 2, as described above. Chow teaches further comprising a management unit operable to manage a certificate to verify validity of the home terminal apparatus, wherein the communication unit sends, to the server apparatus, said certificate managed by the management unit, after receiving the notification packet (Authentication server--Contains authentication information that is used to validate a MTA's identity claim. Responds to authentication requests from the NSP, Col. 9, Lines 47-50, The NSP first validates the MS and authorizes the MS for the service request, Col.14, Lines 36-38).

8. Regarding claim 5, Chow teaches the home terminal apparatus according to Claim 2, as described above. Chow further teaches wherein the packet generation unit

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generates an inquiry packet for inquiring the server apparatus about the control request, when the connection is established to the server apparatus using the second communication protocol (The call flows described below are for illustrative purposes only, and are not meant to follow the exact message format of a specific call-signaling standard. The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, Col. 11, Lines 15-24), and the communication unit sends said inquiry packet to the server apparatus via the router. (Upon receiving the OK message, the NSP forwards it to LTo. The NSP instructs the ERs that it has permission for the IP flow associated with this call. At this point the NSP has completed its transaction and does not maintain any more states for this call. The ERs take over the responsibility of maintaining, Col. 13, Lines 47-56).

9. Regarding claim 6, Chow teaches the home terminal apparatus according to Claim 1, as described above. Chow teaches further comprising an authentication unit operable to perform authentication on the server apparatus as a communication partner, wherein the authentication unit performs the authentication on the server apparatus using a server certificate to verify validity of the server apparatus as a communication partner (Authentication server--Contains authentication information that is used to validate a MTA's identity claim. Responds to authentication requests from the NSP, Col. 9, Lines 47-50, The user powers up his laptop, and the laptop sends a registration



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message to the AP. AP verifies that the laptop is valid for the home network. AP forwards the message to NSP. As a security measure, the NSP can optionally invoke an authentication procedure with the user and/or laptop to verify the registration, Col. 20, Lines 21-54).

10. Regarding claim 7, Chow teaches wherein the home terminal apparatus according to Claim 6, as described above. Chow further teaches wherein the authentication unit performs the authentication on the validity of the server apparatus as a communication partner using one of the following information included in the packet data received by the communication unit: an IP address of the server apparatus (Directory server--Contains E.164 number-to-IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN Gateway, or the IP address of a NSP. Responds to translation requests from the NSP, Col. 9, Lines 42-46); and a terminal ID information unique to the home terminal apparatus (Dynamic Host Configuration Protocol (DHCP) server--Assigns IP addresses to MTAs and PCs for the high-speed data service, Col. 9, Lines 50-52, The NSP retrieves the IP address for the AP of the subscriber's home network, Col. 11, Lines 62-63, The user turns on the laptop and calls his friend using an IP address or DN. The Originating Laptop (LTo) generates an INVITE (no-ring) message and sends it to the NSP. Upon receiving the INVITE (no-ring) message, the NSP registers and

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authenticates/authorizes LTo for the service request, Col. 13, Lines 35-46).

11. Regarding claim 8, Chow teaches the home terminal apparatus according to Claim 6, as described above. Chow further teaches wherein the authentication unit destroys the packet data, when the communication unit receives said packet data within a predetermined interval (The user turns on the laptop and calls his friend using an IP address or DN. The Originating Laptop (LTo) generates an INVITE (no-ring) message and sends it to the NSP. Upon receiving the INVITE (no-ring) message, the NSP registers and authenticates/authorizes LTo for the service request. The NSP maps the DN to an IP address, if needed, and confirms the location of the Terminating Laptop (LTt). The NSP generates an INVITE message and sends it to LTt, Col13, Lines 35-40).

12. Regarding claim 9, Chow teaches the home terminal apparatus according to Claim 1, as described above. Chow teaches further comprising an encryption unit operable to encrypt data in a channel between the home terminal apparatus and the server apparatus that uses the second communication protocol (data communication), when the control information is sent/received to and from the server apparatus. (Alternatively, if ADSL is used, then the modem is an ADSL modem. MTA digitally encodes multimedia signals, encapsulates the encoded signal in IP packets, and delivers the packets to the network via the modem, Col. 8, Lines 21-25).

13. Regarding claim 11, Chow teaches the home terminal apparatus according to Claim 1, as described above.

Chow teaches further comprising a control unit operable to control the home terminal apparatus according to the control information (EWCSP Access Port connected to MTA. The AP and MTA may be physically one unit or two physically distinct and interconnected units. Media terminal equipment integrated with a modem for access to the service provider's broadband transport network and to the service provider's broadband packet network, Col. 8, Lines 12-18, the access port receives and sends wireless signals to a plurality of wireless devices. This architecture also allows the user to control these devices remotely from the residence, business, SOHO or public environments, Col. 2, Lines 62-66).

14. Regarding claim 12, Chow teaches the home terminal apparatus according to Claim 11, as described above. Chow further teaches wherein a plurality of terminal apparatuses are connected to the home terminal apparatus via the home network (EWCSP, Fig. 1(118)), each of the terminal apparatuses includes an apparatus control unit operable to control said each of the terminal apparatuses itself (The access port receives and sends wireless signals to a plurality of wireless devices. This architecture also allows the user to control these devices remotely from the residence, business, SOHO or public environments, Col. 2, Lines 62-66), the communication unit sends the

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control information to each of the terminal apparatuses, and the apparatus control unit controls said each of the terminal apparatuses according to the control information (Note that any second-generation or third-generation wireless standard that supports the SMS feature can also be used, e.g., GSM. The access port can also communicate with wireless enabled devices using a short message process adapted to support home control service aspects, Col 11, Lines 34-39, Home Control of a TIA/EIA-136-enabled Appliance via the TIA/EIA-136 Short Message Feature. The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, Col. 11, Lines 15-24).

15. Regarding claim 13, Chow teaches the home terminal apparatus according to Claim 1, as described above. Chow further teaches wherein the server apparatus includes:

a second communication unit operable to send/receive packet data; and

a second packet generation unit operable to generate packet data to be sent to the home terminal apparatus (A system controller, the NSP, residing in the service provider's broadband packet network, controls and administers the access ports and associated service requests. A service provider can distribute services via the broadband home access devices through the EWCSF to the subscriber at home, Col. 6, Lines 2-10),

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wherein the second packet generation unit generates the notification packet indicating the occurrence of the control request to control the home terminal apparatus, when said control request occurred in the server apparatus, and the second communication unit sends said notification packet to the home terminal apparatus via the router (In the home environment, the wireless Short Message feature (e.g., as defined in TIA/EIA-136) may be used for supporting one-way/two-way low-speed home control features such as home appliances, electronics, devices, etc, Col. 10, Lines 47-51, Home Control of a TIA/EIA-136-enabled Appliance via the TIA/EIA-136 Short Message Feature. The call flows described below are for illustrative purposes only, and are not meant to follow the exact message format of a specific call-signaling standard. The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, Col. 11, Lines 15-24, Upon receiving the OK message, the NSP forwards it to LTo. The NSP instructs the ERs that it has permission for the IP flow associated with this call. At this point the NSP has completed its transaction and does not maintain any more states for this call. The ERs take over the responsibility of maintaining, Col. 13, Lines 47-56).

16. Regarding claim 14, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches

wherein a mobile terminal device is further connected to the external network, the

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mobile terminal device being capable of sending the control request to control the specific home terminal apparatus and

the second packet generation unit generates the notification packet, when the second communication unit receives the control request from the mobile terminal device. (A subscriber has programmed his VCR to tape a major sports event while he is away from home. The VCR is equipped with a TIA/EIA-136 radio and capable of processing TIA/EIA-136 SMS messages. He discovers that the event has been delayed by an hour. He uses his Web-enabled wireless PDA to log on to the Home Networking Web site, and after an authentication procedure, he is authorized to communicate with his home network. He selects an option on the Web page to send a message to his VCR. He enters the command to reset the VCR programming to the new time, Col. 11, Lines 46-60, Fig. 1 (136, 132, 128)).

17. Regarding claim 15, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches wherein the second packet generation unit generates the control packet data including the control request, and

the second communication unit sends said control packet data to the home terminal apparatus via the router, after the connection is established to the home terminal apparatus using the second communication protocol (EWCSP provides accesses and services from the service provider's broadband packet network via a service provider's

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broadband transport network. A system controller, the NSP, residing in the service provider's broadband packet network, controls and administers the access ports and associated service requests. A service provider can distribute services via the broadband home access devices through the EWCSP to the subscriber at home, Col. 6, Lines 2-10, VoIP, abstract, The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, Col. 11, Lines 15-24).

18. Regarding claim 16, Chow teaches the home terminal apparatus according to Claim 15, as described above. Chow further teaches wherein the second communication unit sends the control packet data to the home terminal apparatus via the router, only when the control request occurred in the server apparatus (A system controller, the NSP, residing in the service provider's broadband packet network, controls and administers the access ports and associated service requests. A service provider can distribute services via the broadband home access devices through the EWCSP to the subscriber at home, Col. 6, Lines 2-10, VoIP, abstract, The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, Col. 11, Lines 15-24).

19. Regarding claim 17, Chow teaches the home terminal apparatus according to Claim 15, as described. Chow further teaches wherein the second communication unit sends the control packet data to the home terminal apparatus via the router, only when receiving, from the home terminal apparatus, an inquiry packet for inquiring about the control request (The communication exchange between the NSP and the Network server and between the NSP and the AP, and the AP and the VCR are illustrated accordingly to the ANSI-41 and TIA/EIA-136 standard respectively, Col. 11, Lines 15-24, Upon receiving the OK message, the NSP forwards it to LTo. The NSP instructs the ERs that it has permission for the IP flow associated with this call. At this point the NSP has completed its transaction and does not maintain any more states for this call. The ERs take over the responsibility of maintaining, Col. 13, Lines 47-56).

19. Regarding claim 18, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches wherein the server apparatus further includes:  
a terminal information storage unit operable to store the following information included in the packet data received by the second communication unit as terminal information: a terminal ID of the home terminal apparatus; a global address of the router which is a sender's address; and a global port number of the router which is a sender's port



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number (Directory server--Contains E.164 number-to-IP address translation information.

An E.164 number may be translated to either the IP address of a home device, the PSTN Gateway, or the IP address of a NSP. Responds to translation requests from the NSP, Col. 9, Lines 42-46, Dynamic Host Configuration Protocol (DHCP) server--Assigns IP addresses to MTAs and PCs for the high-speed data service, Col. 9, Lines 50-52, The NSP retrieves the IP address for the AP of the subscriber's home network, Col. 11, Lines 62-63; and

an extraction unit operable to extract (Voice signals are also accepted from a plurality of tip/ring interfaces and forwarded to a broadband transport interface for back haul of data and voice packets, Abstract, the broadband transport interface is the primary path for backhaul of data and voice packets, Col. 20, Lines 57-59), from the terminal information storage unit, the global address and the global port number which correspond to the terminal ID (IP addresses), when the control request to control the home terminal apparatus with said terminal ID occurred in the server apparatus wherein the second packet generation unit generates the notification packet that includes notification information, the notification information being information indicating the occurrence of the control request, and the notification packet (The NSP retrieves the IP address for the AP of the subscriber's home network, Col. 11, Lines 62-63, The user turns on the laptop and calls his friend using an IP address or DN. The Originating Laptop (LTo) generates an INVITE (no-ring) message and sends it to the NSP. Upon receiving the INVITE (no-ring) message, the NSP registers and authenticates/authorizes LTo for the service request, Col. 13, Lines 35-46) including, respectively as a destination address

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and a destination port number, the global address and the global port number extracted by the extraction unit. (The NSP platform also functions as a transaction server that participates in call processing and controls access to network resources (including QoS in the packet network). It translates E.164 addresses to destination packet addresses either internally or by accessing the Directory server, Col. 8, Lines 63-67, Col. 9, Lines 1, Once LTt receives the INVITE (ring) message and successfully reserves network resources, it begins to generate RINGING to the destination user and sends a 180 RINGING message to LTo. LTo begins to play audible ringback tone to the calling user. After the destination user answers the call, LTt sends a 200 OK message to LTo. LTt also begins to generate RTP packets of encoded voice and send them to LTo using the IP address and port number specified in the original INVITE (no-ring) message, Col, 13, Lines 63-66, Col. 14, Lines 1-5)

20. Regarding claim 19, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches wherein the server apparatus further includes a second management unit operable to manage a server certificate to verify validity of the server apparatus, wherein the second communication unit sends, to the home terminal apparatus, said server certificate managed by the second management unit, after receiving, from the home terminal apparatus, the connection request packet for requesting a connection to the server apparatus using the second communication protocol (Authentication server--

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Contains authentication information that is used to validate a MTA's identity claim.

Responds to authentication requests from the NSP, Col. 9, Lines 47-50, The NSP first validates the MS and authorizes the MS for the service request, Col.14, Lines 36-38).

21. Regarding claim 20, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches wherein the server apparatus further includes a second authentication unit operable to perform authentication on the home terminal apparatus as a communication partner, wherein the second authentication unit performs the authentication on the home terminal apparatus using a certificate to verify validity of the home terminal apparatus as a communication partner (Authentication server--Contains authentication information that is used to validate a MTA's identity claim. Responds to authentication requests from the NSP, Col. 9, Lines 47-50, The user powers up his laptop, and the laptop sends a Registration message to the AP. AP verifies that the laptop is valid for the home network. AP forwards the message to NSP. As a security measure, the NSP can optionally invoke an authentication procedure with the user and/or laptop to verify the registration, Col. 20, Lines 21-54).

22. Regarding claim 21, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches

wherein the server apparatus further includes a second encryption unit operable to encrypt data in a channel between the home terminal apparatus and the server apparatus that uses the second communication protocol, when the control information is sent/received to and from the home terminal apparatus (alternatively, if ADSL is used, then the modem is an ADSL modem. MTA digitally encodes multimedia signals, encapsulates the encoded signal in IP packets, and delivers the packets to the network via the modem, Col. 8, Lines 21-25).

23. Regarding claim 22, Chow teaches the home terminal apparatus according to Claim 13, as described above. Chow further teaches wherein an application server is further connected to the external network (Fig. 1(138, 108), the second packet generation unit in the server apparatus generates the notification packet indicating the occurrence of the control request, the notification packet including an application server identifier for identifying the application server, the second communication unit sends said notification packet to the home terminal apparatus via the router (Fig. 1, network serves(138), network server platform (108), Network server Platform (NSP) Administers the wireless terminals, including call processing, Operations, Administration and Maintenance (OA&M)Col. 8, Lines 57-59), the home terminal apparatus further comprises:

a storage unit operable to store (The DSPs are coupled to a main central processing unit (CPU) that includes ROM and RAM memory. The main computer can be replaced

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by an Application Specific Integrated Circuit (ASIC), a Field Programmable Gate Array (FPGA), a Reduced Instruction Set Computer (RISC) or any combination of the above, Col. 17, Lines 23-33) application server identifier/address information made up of at least the application server identifier and an address of the application server; and an extraction unit operable to extract (Voice signals are also accepted from a plurality of tip/ring interfaces and forwarded to a broadband transport interface for back haul of data and voice packets, Abstract, The broadband transport interface 818 is the primary path for backhaul of data and voice packets, Col.20, Lines 57-59), from the application server identifier/address information stored by the storage unit, the address of the application server that corresponds to the application server identifier included in the notification packet, when the communication unit receives said notification packet from the router (Edge router (ER)-Enforces the Quality of Service (QoS) policies and is the access router for the packet network, Col. 8, Lines 50-52, Fig.1(124)) wherein the packet generation unit generates the connection request packet that describes the address of the application server as a destination address (Q.931 signaling is used only to establish the B-channels between the AP and the MTA; packetized voice or data are then sent over the B-channels through the service provider's broadband packet network to their end destinations, Col. 7, Lines 1-5, The NSP platform also functions as a transaction server that participates in call processing and controls access to network resources (including QoS in the packet network). It translates E.164 addresses to destination packet addresses either internally or by accessing the Director server, Col.8,

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Lines 63-67).

24. Regarding claim 23, Chow teaches the home terminal apparatus according to Claim 22, as described above. Chow further teaches wherein the storage unit (The DSPs are coupled to a main central processing unit (CPU) that includes ROM and RAM memory. The main computer can be replaced by an Application Specific Integrated Circuit (ASIC), a Field Programmable Gate Array (FPGA), a Reduced Instruction Set Computer (RISC) or any combination of the above, Col. 17, Lines 22-34) additionally stores a port number of the application server to the application server identifier/address information (The NSP platform also functions as a transaction server that participates in call processing and controls access to network resources (including QoS in the packet network). It translates E.164 addresses to destination packet addresses either internally or by accessing the Directory server. The NSP platform may physically consist of several server, Col. 8, Lines 63-67), the extraction unit extracts (haul back), from the application server identifier/address information stored by the storage unit, the address of the application server and the port number of the application server that correspond to the application server identifier included in the notification packet, when the communication unit receives said notification packet from the router (The main CPU is primarily a router of information between the various semi-autonomous endpoints, Col. 18, Lines 27-29), the packet generation unit generates the connection request packet that describes (Packets of voice and data information received over the Ethernet interface are passed

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to the appropriate endpoint as desired by the user. Additionally, the main CPU handles some of the higher-level protocol functions for these endpoints in order to assure quality of service is maintained throughout, Col. 18, Lines 27-34) the address of the application server as a destination address and the port number of the application server as a destination port number, and the communication unit sends said connection request packet to the server apparatus via the router (Directory server--Contains E.164 number-to-IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN Gateway, or the IP address of a NSP. Responds to translation requests from the NSP, Col. 9, Lines 42-46).

25. Regarding claim 24, Chow teaches the home terminal apparatus according to Claim 22, as described above. Chow further teaches wherein the storage unit (a main central processing unit (CPU) that includes ROM and RAM memory, Col. 17, Lines 22-34) further stores the application server identifier/address information that includes the application server identifier and a URL of the application server, the extraction unit extracts (haul back), from the application server identifier/address information stored by the storage unit, the URL of the application server that corresponds to the application server identifier included in the notification packet, when the communication unit receives said notification packet from the router, and the communication unit sends the connection request packet to the URL (Domain Name

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server(DNS)--Standard DNS for high-speed data service, Col. 9, Lines 53-54).

26. Regarding claim 25, Chow teaches the home terminal apparatus according to Claim 24, as described above. Chow further teaches wherein an address list notification server is further connected to the external network (Fig. 1), the address list notification server includes a sending unit operable to send, to the home terminal apparatus, an address list notification packet including another application server identifier/address information via the router, and the home terminal apparatus further comprises an update unit operable to update the application server identifier/address information stored by the storage unit (a main central processing unit (CPU) that includes ROM and RAM memory. The main computer can be replaced by an Application Specific Integrated Circuit (ASIC), a Field Programmable Gate Array (FPGA), a Reduced Instruction Set Computer (RISC) or any combination of the above, Col. 17, Lines 23-33) on the basis of said another application server identifier/address information included in the received address list notification packet from the router (Directory server--Contains E.164 number-to-IP address translation information. An E.164 number may be translated to either the IP address of a home device, the PSTN Gateway, or the IP address of a NSP. Responds to translation requests from the NSP, Col. 9, Lines 42-46, Network server Platform (NSP) interworks with the other server and/or gateways (GWs) to establish a call end-to-end. The NSP platform also functions as a transaction server that participates in call processing and



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controls access to network resources (including QoS in the packet network). It translates E.164 addresses to destination packet addresses either internally or by accessing the Directory server, Col.8, Lines 63-67)

27. Regarding claim 26, Chow teaches the home terminal apparatus according to Claim 1, as described above. Chow further teaches wherein the router is directly connected to the external network, not via an internet service provider (Fig. 1(124)).

28. Regarding claim 30, 34 and 35, Chow teaches wherein A program for a communication method in which an external network to which a server apparatus is connected and a home network to which a home terminal apparatus is connected are connected via a router (Fig. 1, Home network (104,112, EWCSP, Router (124)), the program causing a computer to function as the units in the home terminal apparatus according to Claim 1(Media Terminal Adapter uses the access port(s) to receive and send wireless signals to a plurality of wireless devices in accordance with the call and service termination communications, Col. 3, Lines 43-4).

29. Regarding claim 31, 36 and 37, Chow teaches wherein A program for a communication method in which an external network to which a server apparatus is connected and a home network to which a home terminal apparatus is connected are connected via a router (Fig. 1, Home network (104,112, EWCSP, Router (124)), the program causing a computer to function as the units in the server apparatus according to Claim 1(A system controller, the NSP, residing in the service provider's broadband packet network, controls and administers the access ports and associated service requests. A service provider can distribute services via the broadband home access devices through the EWCSP to the subscriber at home, Col. 6, Lines 2-10).

30. Claim 33 has similar limitations as claim 1 and 2; therefore, it is rejected under the same rationale as in claim 1 and 2.

***Claim Rejections - 35 USC § 103***

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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32. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chow et al.** U.S. Patent No. **US 7,010,002** in view of **Inoue** U.S. Patent No. **US 7,103,663**.

33. In claim 4, Chow teaches wherein the encryption unit (Alternatively, if ADSL is used, then the modem is an ADSL modem. MTA digitally encodes multimedia signals, encapsulates the encoded signal in IP packets, and delivers the packets to the network via the modem, Col. 8, Lines 21-25).

With respect to claim 4, Chow teaches the invention set forth above except for the claimed "uses SSL to encrypt the channel". Inoue teaches that it is well known to use SSL to encrypt the channel (ADSL (Asymmetric Digital Subscriber Line) that is a broadband high-speed public network and SSL (Secure Sockets Layer (Col. 5, Lines 30-41)). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chow's invention by using Secure Sockets Layer (SSL), which is cryptographic protocols which provide secure communications on the Internet for such things as web browsing, e-mail, Internet faxing, instant messaging and other data transfers (as taught by Inoue).


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on \*M-F\*\* from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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